EXHIBIT A-1

NOTES:

1. DESIGN CONDITIONS:
   TEMPERATURE: 900F
   PRESSURE: 5 PSI(G)
   CORROSION ALLOWANCE: 0 031"
   CODE: ASME B31.1 - 2014 POWER PIPING
2. ALL PIPE WELDING SHALL BE IN ACCORDANCE WITH ASME B31.1-2014 POWER PIPING
3. ALL WELDS AND WELD JOINTS, INCLUDING FILLET WELDS, SHALL CONFORM TO ASME BOILER AND PRESSURE VESSEL CODE.
4. ALL WELDS SHALL BE INSPECTED AND TESTED IN ACCORDANCE WITH ASME B31.1-2014 POWER PIPING.
5. BUTT WELDS FOR ALL SIZES REQUIRE 100% MT OR PT.
6. ALL WELD BRANCH CONNECTIONS 100% RT OR UT
7. IN LIEU OF VOLUMETRIC EXAMINATION (RT,UT) OF WELDED BRANCH CONNECTIONS WHEN REQUIRED, SURFACE EXAMINATION (PT,MT) IS ACCEPTABLE AND WHEN USED, SHALL BE PERFORMED AT THE LESSER OF ONE-HALF OF THE WELD THICKNESS OR EACH ½" OF WELD THICKNESS AND ALL ACCESSIBLE FINAL WELD SURFACES.
8. ALL FILLET AND SEAL WELDS REQUIRE 100% PT OR MT INSPECTION.
9. ALL WELDS 100% VISUAL EXAMINATION
10. ALL ELBOWS TO CONFORM TO B16.9
11. HYDROSTATIC TEST @ 9 PSI(G) IS REQUIRED. THE WATER SHALL BE NON-CORROSIVE WITH A CHLORIDE CONTENT LIMITED TO 50 PPM AND TEMPERATURE SHALL BE >/=70°F (21°C) AND <100°F (38°C).
12. ENSURE ALL AMMONIA SUPPLY PIPING WELDMENT IS THOROUGHLY CLEANED INSIDE AND FREE OF DEBRIS AND WELD SPATTER/SUGAR. MASK ALL OPENINGS TO PREVENT DIRT BUILD UP/CONTAMINATION.
13. DECIMAL VALUES ARE SHOWN WITH DECIMAL TOLERANCE VALUES:

    DECIMAL PLACES 0.X = ± 0.1 TOLERANCES APPLIED

    0.XX = ± 0.05

    0.XXX = ± 0.010

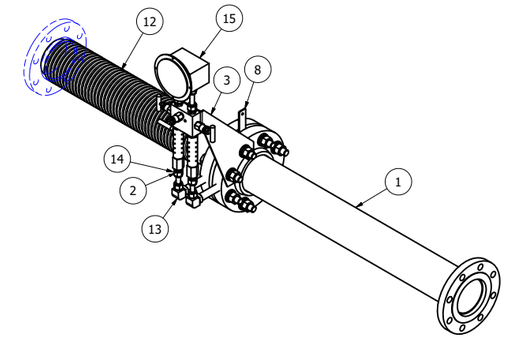
    FRACTIONAL AND ANGULAR VALUES ARE SHOWN WITH FRACTIONAL OR ANGULAR TOLERANCE VALUE:

    FRACTIONS = ± 1/6

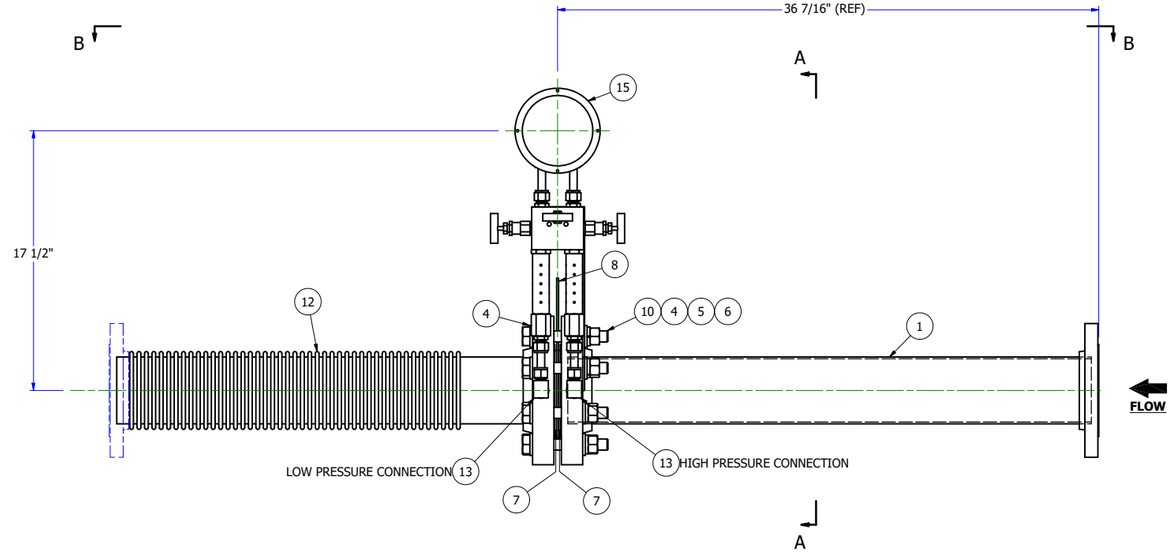
    ANGLES = ± 1°
14. ALL FLANGE HOLES STRADDLE CENTER LINE.
15. PIPE LENGTHS IN BOM ARE FOR REFERENCE ONLY.
16. HOLD CENTER TO CENTER PIPE DIMENSIONS AND FLANGE TO FLANGE DISTANCES.
17. ALL LINEAR DIMENSION TOLERANCE IS ± 1/16".

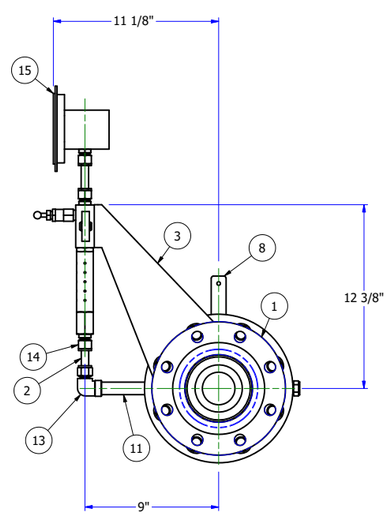
    ALL ANGULAR DIMENSION TOLERANCE IS ± 1°.
18. TAG AND PACKAGE FOR SHIPMENT.
19. ESTIMATED TOTAL WEIGHT IN LBS: 158

ITEM	QTY	PART No.	DRAWING	TITLE	DESCRIPTION	MATERIAL	THICKNESS	WIDTH	LENGTH
1	1	10699-CS3411	Yes	AIG PIPING	WELDMENT				
2	2	10699-CS3413-01	No	INSTRUMENT TUBING	1/2" X 0.035" WALL	304 SS			2 13/16 in
3	1	10699-CS3413-02	No	GAUGE/MANIFOLD SUPPORT	11 Ga SHEET	304 SS	1/8 in	11 21/32 in	12 3/8 in
4	16	FW075304		FLAT WASHER	3/4	304 SS			
5	8	HN07510A1948M		HEX NUT	3/4-10 UNC - 2B	ASTM A194 GRADE 8M			
6	8	LW075304		LOCK WASHER	3/4 - REGULAR	304 SS			
7	2	SCR-LM1510-01	No	FLEXITALLIC LSI SPIRAL-WOUND GASKET WITH FLEXICARB FILLER MATERIALS	4" NPS #300	304 SS			
8	1	SCR-LM1510-02	Yes	ORIFICE FLANGE PLATE	4" NPS #300	304 SS	1/8 in	7 1/8 in	11 1/8 in
9	2	SCR-LM1510-08		HEX PLUG	1/2" NPT SWAGELOK SS-8-P	316 SS			
10	8	SCR-LM1510-09		HEX BOLT	3/4-10 UNC - 5 1/4"LG	ASTM A193 Gr. B8			
11	2	SCR-LM1510-10		PIPE NIPPLE SWAGELOK SS-8-HLN-4.00	1/2" SCH 40 X 4" LG	316 SS			
12	1	SCR-LM1521	Yes	4" FLEX PIPE	WELDMENT				
13	2	SCR-LM1800-02		FEMALE ELBOW	SWAGELOK SS-810-8-8 1/2" OD TUBE X 1/2" FEMALE NPT	Generic			
14	2	SCR-LM1800-03		SWAGELOK TUBE FITTING SS-600-1-4	1/2" TUBE OD x 1/2" MALE NPT	316 SS			
15	1	SCR-LM2001	Yes	COOLING TOWER	3 VALVE MANIFOLD & DP GAUGE				



ISO VIEW





REV	DESCRIPTION	BY	DATE	CHECKED	ENGINEERING	APPROVED
A	ISSUED FOR FABRICATION	MM	2016-11-10	CRD	HB	HB

INNOVA

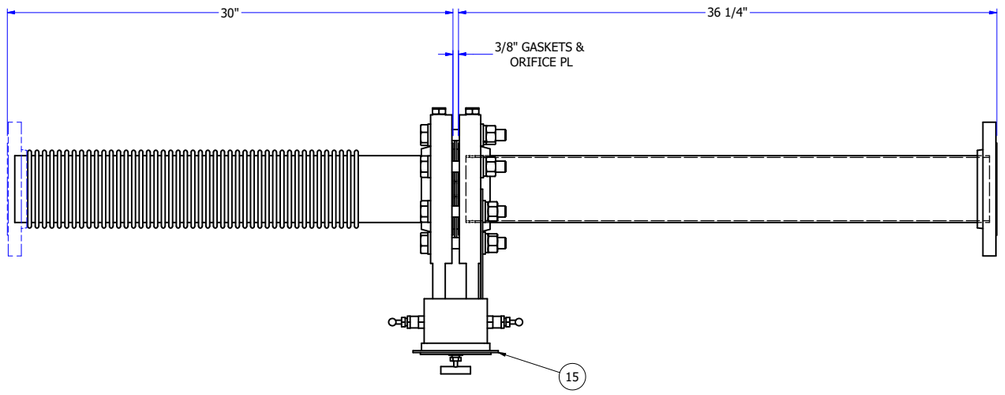
AIG ORIFICE PIPE SPOOL

ASSEMBLY

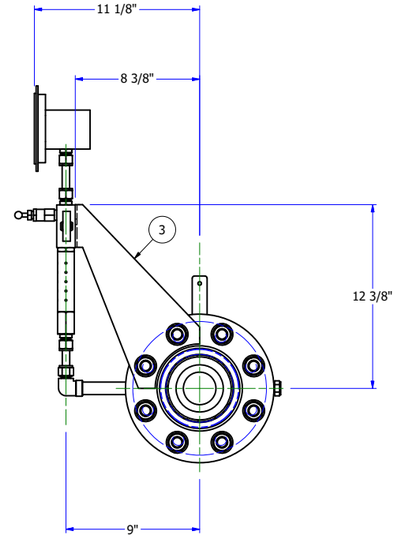
THIRD ANGLE PROJECTION

DO NOT SCALE DRAWING

DRAWN	MM	2016-11-10	DRAWING No.	REV
CHECKED	CRD	2016-11-29	**10699-CS3413**	**A**
ENGINEERING	HB	2016-11-29		
APPROVED	HB	2016-11-29	SHEET 1 OF 2	



VIEW B-B



SECTION A-A
GAUGE/MANIFOLD
SUPPORT DETAIL

INNOVA

AIG ORIFICE PIPE SPOOL

ASSEMBLY

DRAWN	MM	2016-11-10	DRAWING No.	REV
CHECKED	CRD	2016-11-29	**10699-CS3413**	**A**
ENGINEERING	HB	2016-11-29		
APPROVED	HB	2016-11-29	SHEET 2 OF 2	